

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please cancel claims 1-27, 51-77, and 101-127 without prejudice or surrender of subject matter and add the following claims.

LISTING OF CLAIMS:

Claims 1-150 (Canceled)

151. (New) A method of establishing and maintaining an on-line presence, said method comprising:

- receiving at a server a new user login request from a user computer;

- validating the request;

- if the request is validated, sending a Web page to the user computer, said Web page containing an applet and an assigned unique session ID number;

- receiving an HTTP request from the applet running on the user computer, said request including an IP address, the assigned unique session ID number, and the user's name, said applet using the HTTP request to maintain a virtual continuous HTTP connection with the server;

- upon receipt of the HTTP request, making a TCP/IP open socket request to obtain an open socket for communication with the user machine;

- obtaining the open socket for communication with the user computer sending the login request;

- updating a user table that tracks each user that is on-line to add the new user; and

- updating a group table that tracks groups of on-line users to reflect the on-line presence of the new user.

152. (New) A method of establishing and maintaining an on-line presence, as recited in claim 151, wherein the user table includes a socket file descriptor of the HTTP connection for the user, a counter used to keep the connection open, and a set of dynamic session information that includes an IP address identifying the user machine, an IP address of an entity that maintains

the socket and the HTTP connection with the user machine, a TCP port number, the assigned session ID, a list of groups to which the user belongs, and a group that is displayed on the user machine as the active group.

153. (New) A method of establishing and maintaining an on-line presence, as recited in claim 151, wherein said group table includes a list of groups that have users currently on-line and a list of members in each group that are currently on-line.

154. (New) A method of establishing and maintaining an on-line presence, as recited in claim 151, wherein the step of obtaining the open socket is performed by an alternate socket handler, said alternate socket handler obtaining the open socket without creating a new thread of execution at the server.

155. (New) A method of establishing and maintaining an on-line presence, as recited in claim 154,

wherein the socket is stored in a socket table at the server, said socket having a file descriptor by which said socket is referenced; and

wherein the alternate socket handler accesses the socket by referencing its file descriptor.

156. (New) A system for establishing and maintaining an on-line presence, the system comprising:

one or more session manager servers, each configured to receive a new user login request, validate the new user login request, send a Web page to the user computer, said Web page containing an applet and an assigned unique session ID number, if the new user request is validated, receive an HTTP request from the applet running on the user computer, said request including an IP address, the assigned unique session ID number, and the user's name, said applet configured to use the HTTP request to maintain a virtual continuous HTTP connection with the server, make a TCP/IP open socket request to obtain an open socket for communication with the user machine, upon receipt of the HTTP request, and obtain the open socket for communication with the user computer sending the login request; and

a database server that contains at least one user table that tracks each user that is on-line and at least one group table that tracks groups of on-line users, said database server configured to update the user table to add the new user and update the group table so as to reflect the on-line presence of the new user.

157. (New) An article of manufacture for establishing and maintaining an on-line presence, the article of manufacture comprising a computer readable medium holding computer executable instructions for performing a method comprising:

- receiving at a server a new user login request from a user computer;

- validating the request;

- if the request is validated, sending a Web page to the user computer, said Web page containing an applet and an assigned unique session ID number;

- receiving an HTTP request from the applet running on the user computer, said request including an IP address, the assigned unique session ID number, and the user's name, said applet using the HTTP request to maintain a virtual continuous HTTP connection with the server;

- upon receipt of the HTTP request, making a TCP/IP open socket request to obtain an open socket for communication with the user machine;

- obtaining the open socket for communication with the user computer sending the login request;

- updating a user table that tracks each user that is on-line to add the new user; and

- updating a group table that tracks groups of on-line users to reflect the on-line presence of the new user.